

Exhibits regarding UVM's JIPMP 2020-2025 dated 10/13/2020

B. Headrick 11/16/2020

Exhibit 1: UVM's data indicates a (556) parking space daytime peak parking deficit

UVM's parking supply (JIPMP, page 16)	4,939 (includes 200 spaces on Pine Street that have been subleased to auto-dealer until August 2021.
UVM's on-campus parking reaches effective capacity at 85%. (JIPMP, Appendix B, page 42, 2 nd paragraph)	X 85%
UVM's effective parking capacity	4939 X 85% = 4,198 parking spaces
Minus UVM's parking demand (JIPMP page 19, Table 4-4)	(4,754)
UVM's parking deficit = the additional number of parking spaces that UVM needs before reaching its effective parking capacity	4198 – 4754 = - 556 UVM has a (556) parking space deficit. UVM needs an additional 556 parking spaces in order to not exceed its effective parking capacity.
Total number of Off-Campus parking spaces that UVM needs in order to not exceed its effective Parking Capacity	200 spaces on Pine Street + 556 additional spaces needed = UVM needs a total of 756 parking spaces off-campus when students return to campus in Fall 2021.

Exhibit 2: UVM's data indicates a (494) parking space deficit in Year 2025

UVM's parking supply (JIPMP, page 21)	5,045 (includes 200 spaces on Pine Street and 200 spaces in Colchester.
UVM's on-campus parking reaches effective capacity at 85%. (JIPMP, Appendix B, page 42, 2 nd paragraph)	X 85%
UVM's effective parking capacity	5,145 X 85% = 4,237 parking spaces
Minus UVM's parking demand (JIPMP page 21, Table 4-8)	(4,867)
UVM's parking deficit = the additional number of parking spaces that UVM needs before reaching its effective parking capacity	$4,237 - 4,867 = - 494$ UVM has a (494) parking space deficit. UVM needs an additional 494 parking spaces in order to not exceed its effective parking capacity.
Total number of Off-Campus parking spaces that UVM needs in order to not exceed its effective Parking Capacity	400 spaces on Pine Street + 494 additional spaces needed = UVM needs a total of 894 parking spaces off-campus no later than Fall 2025.

Exhibit 3A: UVM's data indicates that UVM already has an evening parking deficit of -256 spaces for sold-out basketball games with 3000 spectators and a parking deficit of -536 spaces when it hosts sold-out men's hockey games with 4,000 spectators.

UVM told Act 250 Commission in October 2018 that it had this many parking spaces available in the evening when there are no PFG events (Exhibit 5)	800 to 1100
My count of available parking spaces with no PFG event, Fall 2008 evening	551 Footnote (a)
Patrick Gym's game seating capacity	3,228 (Tarrant Center Multipurpose will be used for basketball games after the PFG project is completed and its game seating capacity will be 3,241)
Method A: CDO Article 8 requires 4 parking spaces per seat. 3,228 divided by 4 = 807 parking spaces required for Patrick Gym.	807 parking spaces needed
Parking Space deficit based on CDO	-256 parking space deficit
OR Method B: based on UVM ticket sales	
Number of non-student event attendees	2,130
+ # of off-campus students who arrive by car	329
Total number of attendees arriving by car	2,469
CDO ratio of 4 passengers/car (unlikely) 2469 divided by 4 = 617 spaces needed.	617 parking spaces needed. (or 1,234 if off-campus attendees arrive 2/car)
Parking space deficit (551 available – 617 spaces needed = 66 parking space deficit)	(66) parking space deficit is conservative. Could be as much as -683 spaces (551-1,234)

(a) In Fall 2018, UVM told the Act 250 Commission that based on its 2014-2019 JIPMP it had a 748 parking space surplus for Fall 2019.

In March 2019, UVM estimated that it had a -533 daytime parking space deficit for Fall 2019. In May 2019, UVM revised this to a -414 daytime parking space deficit. In October 2020, UVM estimates that its Fall 2019 daytime peak parking deficit is 185 +/-210 parking spaces.

By October 2020 UVM's daytime parking space availability was as much as -773 parking spaces less than what UVM told the Act 250 Commission in Fall 2018. (185-210) -748= -773 adjustment to what UVM told the Act 250 Commission for daytime parking net space availability.

Therefore, UVM's evening parking space availability of 800 to 1100 spaces also needs to be reduced by some factor of the 773 parking space forecasting error. My count of 551 empty parking spaces in the evening in Fall 2018 seems about right.

Exhibit 3B: UVM's (536) parking space deficit for sold-out men's hockey games with 4,000 spectators.

UVM told Act 250 Commission in October 2018 that it had this many parking spaces available in the evening when there are no PFG events (Exhibit 5)	800 to 1100
My count of available parking spaces with no PFG event, Fall 2008 evening	551 (See exhibit 3A footnote)
Gutterson's game seating capacity before the PFG project	4,035 (When PFG project is completed, Gutterson's game layout seating capacity will be 4,350. Non-game seating capacity will be 6,300)
Method A: CDO Article 8 requires 4 parking spaces per seat. 4,350 divided by 4 = 1807 parking spaces required for Patrick Gym.	1808 parking spaces needed for renovated Gutterson facility
Parking Space deficit based on CDO	-536 parking space deficit
OR Method B: based on UVM ticket sales	
Number of non-student event attendees	3,316
+ # of off-campus students who arrive by car	719
Total number of attendees arriving by car	3,807
CDO ratio of 4 passengers/car (unlikely) 3807 divided by 4 = 952 spaces needed.	952 parking spaces needed. (or 1,904 if off-campus attendees arrive 2/car)
Parking space deficit (551 available – 952 spaces needed = 401 parking space deficit	(401) parking space deficit is conservative. Could be as much as -1,353 spaces (551-1904)

Exhibit 4: UVM's 2/7/2019 memo to Act 250 Commission regarding UVM plans to : (1) host events of 5,000 persons or more; and (2) use of Gutterson and Tarrant Multipurpose event center concurrently for singular events (1 event using 2 venues).

UVM wrote: "With the exception of commencement and other rare and unusually large events such as Presidential visits, for which we need to have as much flexibility as possible, UVM Athletics is comfortable committing to a combined spectator maximum of 5,000 at one time between Gutterson and Tarrant."



To:
Rachel Lomonaco, Act 250 Coordinator, District 4
111 West Street
Essex Junction, VT 05452

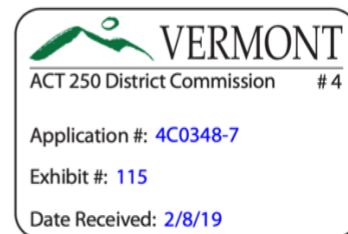
February 7, 2019

Re: Application #4C0348-7, Supplemental Evidence Submittal

Dear Rachel,

As per previous requests, and more recent communication with you, the University would like to submit the following supplemental evidence for this project.

1. The University received the Wastewater System and Potable Water Supply Permit, Exhibit 112: WW-4-0079-2.
2. The University understands the concern from the Act 250 Commission about large spectator events taking place in Gutterson and Tarrant simultaneously. With the exception of commencement and other rare and unusually large events such as Presidential visits, for which we need to have as much flexibility as possible, UVM/Athletics is comfortable committing to a combined spectator maximum of 5,000 at any one time between Gutterson and Tarrant. As the UVM Director of Athletics testified to the Commission, it is not the University's intention to have two large spectator events happening at the same time, but we would want the flexibility to have multiple events going on with smaller capacities, or a large crowd event taking place in



Based on the wording in this letter, 5000 person events will be normal business after the PFG project is completed and events larger than 5,000 persons will occur. A close reading of the sentence indicates that some of the events with more than 5,000 persons will be rare and other events with more than 5,000 persons will just be unusually large.

Exhibit 5: In the Act 250 Commission permit #4C0348-7 for PFG project Finding of Fact #54, the Act 250 Commission finds that UVM will have evening parking deficits when it hosts 5,000 person events at the PFG Complex.

UVM indicated that it will typically have max of 5,000 attendees between Tarrant and Gutterson	5,000 attendees
CDO required number of parking spaces $5000/4 = 1250$	1,250 CDO required parking spaces
UVM said it has 850 to 1100 parking spaces available in the evening	850 to 1100 parking spaces available
Act 250 finds a parking deficit for 5,000 persons events in evening at PFG Complex	Deficit is between -150 and -400 parking spaces

Findings of Fact, Conclusions of Law, and Order #4C0348-7
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50. The Jeffords Center parking lot contains approximately 400 parking spaces. However, 100 of those spaces are leased to the UVM Medical Center. Exhibit #093. On average, 250 - 300 parking spaces are available at the Jeffords Center parking lot during evening events. Exhibits #094 and 095.
51. The Applicant has stated that the number and size of events are limited by existing schedules for the PFG complex, availability of parking and availability of space at the PFG complex. Exhibit #087. The Applicant has stated that they do not anticipate or propose an increase in the scope of events that can be held at the PFG complex as a result of the Project. Exhibit #087.
52. The Applicant has stated that with the exception of a one-day undergraduate commencement ceremony held each year, the maximum capacity of the PFG complex is 7,300 people at any one time, based on building egress capabilities. Exhibits #056 and 085.
53. The Applicant has stated that the Multipurpose Center and Gutterson Field House shall not be used simultaneously for spectator events where the combined attendance exceeds 5,000 persons. Exhibit #115. In addition, the Applicant has stated that the Patrick Gymnasium will no longer be used for spectator events but will be used only as a practice space. Exhibit #056.
54. The *Burlington Comprehensive Development Ordinance* (2018) requires off-street parking for indoor recreational facilities using a ratio of one parking space per four seats.⁶ Exhibits #089 and 093. Using this ratio and a maximum capacity of 5,000 the parking demand would be 1,250 parking spaces. On average, however, between 850 - 1,100 parking spaces are available at the PFG parking area and the Jeffords parking lot for evening events if the *UVM Special Events Circulation Procedures* are implemented.

Exhibit 6A: My estimate, based on my evening parking counts, is that UVM will have a (699) parking deficit when it hosts 5,000 persons at one time on the Athletic Campus.

My count of available parking spaces with no PFG event, Fall 2008 evening	551 (See exhibit 3A footnote)
When UVM starts hosting 5,000 event attendees at one time between Tarrant Multipurpose Event Center and Gutterson on the Athletic Campus	5,000 attendees
CDO Article 8 requires 4 parking spaces per seat. 5,000 divided by 4 = 1,250 parking spaces needed	1,250 parking spaces needed for a 5000 person event
Parking Space deficit based on CDO	-699 parking space deficit
551-1250 = 699 parking space deficit	

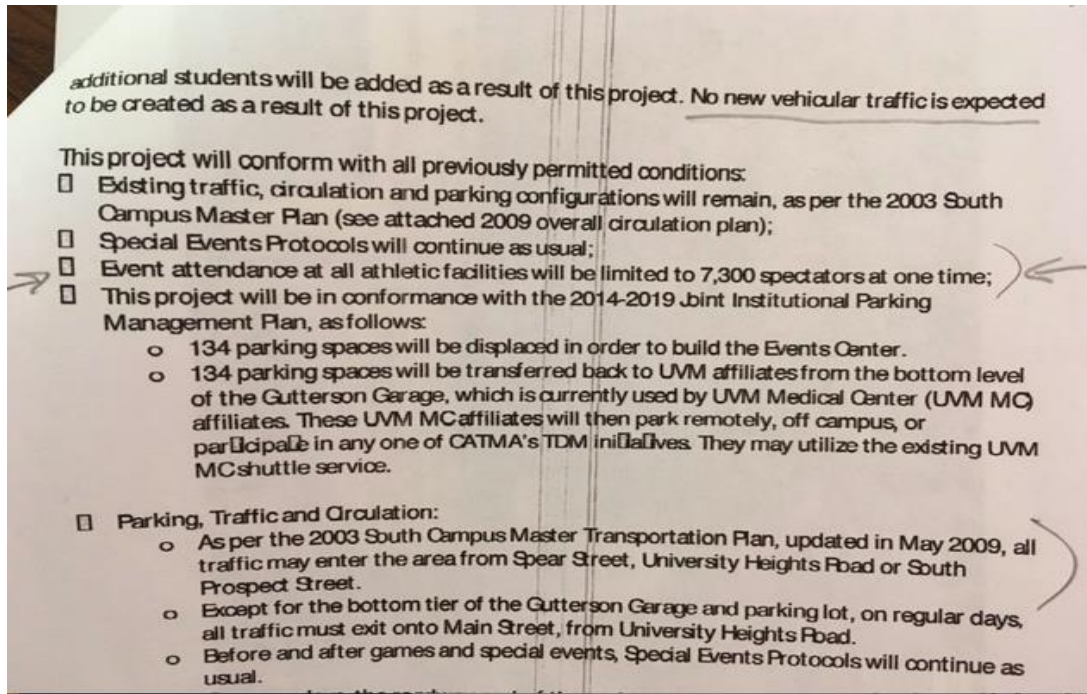
Exhibit 6B: UVM will have a 1,024 parking space deficit when hosting 6,300 persons in Gutterson

My count of available parking spaces with no PFG event, Fall 2008 evening	551 (See exhibit 3A footnote)
When UVM starts hosting 6,300 event attendees at one time in Gutterson	6,300 attendees
CDO Article 8 requires 4 parking spaces per seat. 6,300 divided by 4 = 1,575 parking spaces needed	1,575 parking spaces needed for a 6,300 person event
Parking Space deficit based on CDO	-1,024 parking space deficit
551 – 1575 = -1,024 parking space deficit	

Exhibit 6C: UVM will have a 1,274 parking space deficit when hosting 7,300 spectators on the Athletic Campus

My count of available parking spaces with no PFG event, Fall 2008 evening	551 (See exhibit 3A footnote)
When UVM starts hosting 7,300 spectators at one time on the Athletic Campus	7,300 spectators
CDO Article 8 requires 4 parking spaces per seat. 7,300 divided by 4 = 1,825 parking spaces needed	1,825 parking spaces needed for 7,300 spectators
Parking Space deficit based on CDO	-1,274 parking space deficit
551 – 1,825 = -1,274 parking space deficit	

Exhibit 7: UVM provided a Project Description to the DRB on 7/5/2018 when requesting a permit for the PFG Complex. On the 4th page of this project description UVM states: “Event attendance at all athletic facilities will be limited to 7,300 spectators at one time.”



Note: To host 7,300 spectators at one time, UVM might be signaling that it wants to use indoor and outdoor venues concurrently. This would violate promises UVM made in 2012 when requesting a permit and parking waiver for Virtue Field Phase II.

The focus of that 2012 permit application was UVM's request to add a 2,500 seat stadium to Virtue Field. During the DRB review, UVM said that it will never host indoor and outdoor events concurrently on the Athletic Campus. The Athletic Director, Bob Corran said: “Indoor and outdoor concurrent events would never happen. Firm commitment. I guarantee it. We would never schedule a game on Virtue Field and a game in Gutterson or Patrick Gym. UVM controls.”

Evidence: DRB Meeting, 5/15/12, Virtue Field Phase II Stadium application, Minute 1:37
<https://www.cctv.org/watch-tv/programs/burlington-development-review-board-part-2-1>

Exhibit 8: Other large events to be hosted at the PFG Complex.

Average Attendance	
UVM Men's Basketball	3,000
UVM Women's Hockey	1,250
UVM Men's Hockey	6,000
Commencement	8,000
Concerts (Large)	5,500
Concerts (Small)	2,500
Family Events	4,000
Speaking Events	2,000
Amateur / Exhibition Sports	3,000
Conference/Regional Tournaments	5,000
High School Graduations	3,000
High School Basketball Tournament	1,500

B&D estimates that attendance from these events will be approximately 248,000 annually.

EVENT TYPE	Aggressive
UVM Men's Basketball	6
UVM Women's Hockey	8
UVM Men's Hockey	18
Commencement	3
Concerts (Large)	6
Concerts (Small)	6
Family Events	6
Speaking Events	10
Amateur / Exhibition Sports	4
Conference/Regional Tournaments	4
High School Graduations	5
High School Basketball Tournament	5
Conventions / Tradeshow	4
Consumer Shows	4
Meetings	6
Banquets	8
Other	8
Total Events	111

UVM's May 2009 Campus Life Strategy document, page 8 lists 111 indoor events. This number was a low estimate because UVM men's basketball typically has at least 13 home games and not just 6 home games shown above. In addition there are 38 outdoor UVM team games, and some kinds of events (listed above) are take place over multiple days.

https://trustees.w3.uvm.edu/trustees/cltfl/Final_Report_May-2009.pdf

Exhibit 9: Events will occur frequently. Average 4 per week.

209 days of event traffic per year / 52 weeks per year = average of 4 event days per year

UVM May 2009 Forecasted Data for Proposed Project: # of events, #attendees/event				
Updated 11/3/2018	Number of PFG Events		Number of Days with Event Traffic	Average Attendance per Event
	2017 (a)	Aggressive	Aggressive	Forecast
NON-SCHOOL USES				
Conventions/Tradeshows	0	4	14	1300
Consumer Shows	0	4	4	2800
Meetings	0	6	9	300
Banquets	0	8	8	1500
Other	0	8	12	3000
Subtotal: Non-School Events	0	30	47	
SCHOOL-USES				
UVM Men's Basketball	18	18	18	3318
UVM Women's Basketball (b)	16	16	16	769
UVM Men's Hockey	18	18	18	3705
UVM Women's Hockey	18	18	18	1250
Women's Swimming	4	4	4	
Commencement	2	3	6	8000
Concerts (L)	0	6	6	5500
Concerts (S)	0	6	6	2500
Family Events	0	6	6	4500
Speaking Events	0	10	10	2000
Amateur/Exhibition Sports	1	4	4	3000
Conference/Regional Tournaments	4	4	4	5000
High School Graduations	2	5	5	3000
High School Sports	7	5	5	2000
Subtotal: Number of Indoor Events	90	123	126	
TOTAL NUMBER for PFG EVENTS	90	153	173	
ARCHIE COMPLEX Events	36	36	36	
TOTAL ATHLETIC CAMPUS	126	189	209	

People should not dismiss the impacts of parking and traffic that will result from events that will be hosted on the Athletic Campus. 4 event days per week is very significant.

Exhibit 10: Email from Jonathan Dowds of UVM Transportation Center (he helped with the preparation of the JIPMP). He brings up the topic of on-street parking when I asked if UVM has a parking deficit

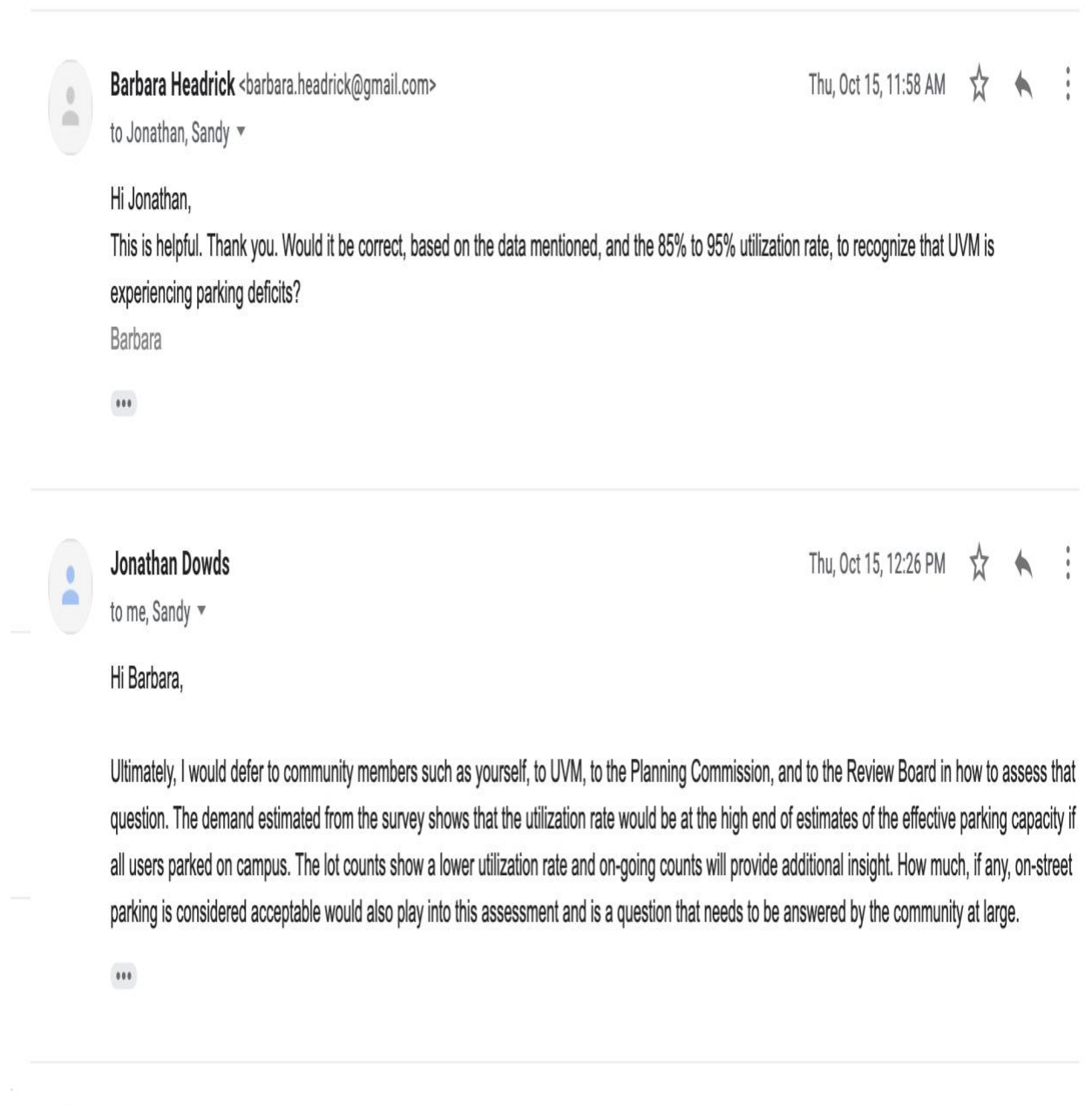


Exhibit 11: email exchange with Jonathan Dowds in which I asked if the net parking range of 184 +/- 210 spaces reflects variability. His response is that it does not. He explained that the range reflects sampling error in the estimate that is implicit when using collected survey data. The sampling error reflects that there is uncertainty regarding the survey data's accuracy (i.e. voter polling data). The margin of error range is used to show that one can have confidence that the result is somewhere inside that range.

Hence, UVM's current net peak parking supply might be -15 spaces (zero because one can't have negative number of parking spaces) or it might be $185+210=395$ spaces, or some number in between. However, UVM's effective parking capacity is reached when 85% of the spaces are full. So by the time UVM has zero to 395 parking spaces remaining, there probably are drivers who are not able to find parking on-campus. That is the latent (hidden) demand that UVM refers to in Appendix B, page 42. This hidden demand is not included in UVM's estimate of its parking demand.

Jonathan Dowds

Thu, Oct 15, 11:50 AM ☆ ↩ ⋮

to Sandy, me ▼

Hello Barbara,

Thanks for reaching out with your questions. I've added Sandy to this email chain as well in case she is able to fill in any additional information.

With regards to the specific points you asked about below:

- a. The margin of error that you reference is the margin of sampling error associated with the CATMA survey rather than day-to-day variability. Because only a subset of users responded to the survey, it is possible – or more accurately *expected* – that the parking demand rate calculated based on that sample will not perfectly match the parking demand rate of the full set of users. This margin of error is primarily a function of sample size. Pew has a nice margin of error explainer in the context of political polling available here: <https://www.pewresearch.org/fact-tank/2016/09/08/understanding-the-margin-of-error-in-election-polls/>

Exhibit 12:

In 2018-2019 there were numerous Front Porch Forum posts by UVM people looking for parking spots near campus. Here is one example:

Seeking Parking Spot for Rent

MICHAEL HOOLEY, HOOLEYS@COMCAST.NET, UNIVERSITY HEIGHTS, BURLINGTON

HOUSING AND REAL ESTATE

I am in search of a parking space for a responsible UVM student. Does anyone have a space available? Thanks, Michael

[EMAIL AUTHOR](#) [REPLY TO](#) [FORUM](#)

A student also knocked on my front door to ask if he could rent a space in my driveway.

Exhibit 13: UVM Board of Trustees discussed employee concerns regarding UVM's parking situation.

University of Vermont Board of Trustees

FEB 1–3, 2018

Staff Council President Karmen Swim reported on the following, of which her written report includes more details: a successful Fiscal Year 2017 staff performance appraisal process and subsequent process feedback; continued work on **parking** and commuting concerns; and an outline of future projects that address staff wellbeing and resources.

Lastly, Staff Council recently submitted recommendations to administrators regarding the parking and commuting needs of the university community. We deeply appreciate the efforts of Transportation and Parking to balance the need for sustainable, environmentally responsible solutions with the needs of our commuting population, including the electric bike program that will be starting soon. However, aside from parking infrastructure improvements, we intend to continue to stress the need to reassess and publicize policies that support alternative commuting and public transit, such as the ability to arrange a flexible schedule. With the continual growth and exciting changes of our campus, we hope commuting is something that can be included in the strategic plan soon.

Exhibit 14:

Between Fall 2016 and fall 2019, UVM's net ON-CAMPUS parking supply increased by 306 spaces. But during the same time frame, it's parking demand increase by 535 spaces.

DAYTIME ON-CAMPUS PARKING SUPPLY AND DEMAND			
	DAYTIME PEAK PARKING DEMAND & SUPPLY ANALYSIS		
	UVM JIPMP data		
EXCLUDING PFG EVENTS	ACTUAL per UVM		
	Fall 2016	Fall 2019	Change
UVM's ON-CAMPUS parking inventory	5,194	5,351	
Spaces Leased to UVMCC	(761)	(612)	
UVM's Net Parking Supply	4,433	4,739	306
<i>UVM Peak Parking Demand:</i>			
On-campus students		714	
Off-campus students		1,261	
Total student parking demand		1,975	
Faculty and Staff		2,376	
Visitors		185	
Fleet		218	
Total Parking Demand	4,219	4,754	535
Net on-campus Parking Supply or (Deficit)	214	(15)	
		because effective parking capacity, is eaced at 85% the deficit is actually (556) spaces after including 200 Pine street spaces	

Exhibit 15: Over the past 3 years (2017-2020), UVM has significantly increased the number of permits it has issued to students and employees.

UVM data. BAH aggregated.								
JIPMP data		Number of Parking Permits Issued by UVM						
		Resident	Off-Campus	To students	To	To car-poolers	Total # Permits	Change from
	Fall actuals	Students	Stdents	in Total	Employees	(employees)	Issued	Prior Year
	2020							
	Fall 2019 actual per 3/11/2020 JIPMP	1,442	1,781	3,223	3,720	32	6,975	19%
	Fall 2018 actual per revised May 2019 JIPMP	1,451	1,358	2,809	2,963	74	5,846	9%
	Fall 2018 actual per 3/12/2019 JIPMP	1,451	1,358	2,809	2,963	74	5,846	
	Fall 2017 actual per 3/12/2018 JIPMP update	1,291	1,558	2,849	2,511		5,360	

Exhibit 16: In Fall 2019, UVM enrolled 1,505 more students than it had forecasted in the 2014-2019 JIPMP

UVM data. BAH aggregated.									
JIPMP data		UVM							
		Number of Students					Change		
	Fall actuals	Undergrad	Graduate/Cert.	Medical	Contin. Ed	Total	vs. Prior Year	vs 5 yr forecast	Since Year 2000
	2020								
	Fall 2019 actual per 3/11/2020 JIPMP	10,700	1,627	478	743	13,548	+202	+1505	
	2019 forecast from 2014- 2019 forecast	10,065	1,524	454	N/A	12,043			

Exhibit 17: March 2019 version of JIPMP for 2019-2024 showed deficits for 2019 and 2024

The parking demand calculation uses the results from the most recent 2018 CATMA student and employee surveys. The results, shown below in Table 4-16 suggests a current parking deficit of 533 spaces.

TABLE 4-16: EXISTING UVM PEAK PARKING DEMAND BY USER GROUP

USER GROUP	NUMBER IN CATEGORY	PEAK % ON CAMPUS ¹	AUTO OWNERSHIP/ MODE SHARE ²	PARKING DEMAND (SPACES)
Residents long-term vehicle storage ³	5,906	100%	25% ³	1,451
Commuters outside 0.5 miles of campus	4,266	20%	43%	369
Commuters within 0.5 miles of campus	3,174	100%	21%	658
			<i>Subtotal</i>	<i>2,425</i>
Full-time faculty/staff	3,606	93%	63%	2,117
Part-time faculty/staff	580	81%	63%	297
			<i>Subtotal</i>	<i>2,414</i>
Visitors				185
UVM fleet vehicles				234
			<i>Subtotal</i>	<i>419</i>
Total peak parking demand				5,311
Off-street parking supply ⁴				4,778
Net shortage				-533

¹The peak hour is assumed to occur on weekdays between 12:00pm and 1:00pm. % peak on campus comes from most recent data survey. 2012 Biennial CATMA Transportation Survey responses.

²Per 2018 CATMA survey, "Auto Mode Share" includes the following modes: "drive alone", one-half of the "carpool", and "shuttle/drive".

³Portion of residential students with a residential parking permit.

⁴See UVM has a total inventory of 5,410 spaces, 632 of which are leased to UVM MC

Comparing these results to the most recent JIPMP, the number of commuter students living within a half mile from campus indicating that they drive or carpool increased from just under 4% to 21%. The associated parking demand increased from 106 spaces in the last JIPMP to 658 spaces today.

TABLE 4-24: FUTURE (2024) PARKING DEMAND AND SUPPLY

USER GROUP	NUMBER IN CATEGORY	PEAK % ON CAMPUS ¹	AUTO OWNERSHIP/ MODE SHARE	PARKING DEMAND (SPACES)
Residential students (long-term vehicle storage)	6,016	100%	25%	1,478
Commuters outside 0.5 miles of campus	4,148	20%	43%	359
Commuters within 0.5 miles of campus	3,086	100%	21%	640
<i>Subtotal</i>				<i>2,477</i>
Full-time faculty/staff	3,606	93%	63%	2,117
Part-time faculty/staff	580	81%	63%	297
			<i>Subtotal</i>	<i>2,414</i>
			Visitors	185
			UVM vehicle fleet	234
			<i>Subtotal</i>	<i>419</i>
			Total peak parking demand	5,310
			Off-street parking supply ²	4,610
			Net Deficit	-700

¹Values for peak % on campus were carried forward from the 2009-2014 JIPMP. The peak hour is assumed to occur on weekdays between 12:00pm and 1:00pm.

²Assumes no change in the current lease of 632 spaces to UVM MC.

Exhibit 18: May 2019 revised version of JIPMP for 2019-2024 also showed deficits for 2019 and 2024

TABLE 4-15: UVM CURRENT ESTIMATED PEAK PERIOD PARKING DEMAND BY USER GROUP

User Group	Number in Category	Peak % on Campus	Demand Generator	Parking Demand (spaces)
Students				
Residential Students			<i>Auto Ownership</i>	
First Year	2,512	81.6%	1.7%	34
Non-First-Year	3,394	90.7%	39.0%	1,200
Subtotal	5,906			1,234
Commuting Students			<i>Mode Share</i>	
Commuting students (inside 0.5 miles)	3,174	89.1%	4.1%	116
Commuting students (outside 0.5 miles)	4,266	91.2%	28.8%	1,122
Subtotal	7,440			1,238
Employees			<i>Mode Share</i>	
Full-time	3,606	90.7%	59.0%	1,929
Part-time	580	53.7%	59.0%	184
Subtotal	4,186			2,113
Other Users				
Visitors				185
Fleet vehicles				234
Total peak parking demand				5,004
Total parking supply				4,590
Net spaces				-414

Sources: Calculated by CATMA Staff using the 2016 and 2018 CATMA Student and Employee Transportation Surveys, as well as information provided by institutional staff.

TABLE 4-23: UVM FUTURE ESTIMATED PEAK PERIOD PARKING DEMAND BY USER GROUP (2024)

User Group	Number in Category	Peak % on Campus	Demand Generator	Parking Demand (spaces)
Students				
Residential Students			<i>Auto Ownership</i>	
First Year	2,558	81.6%	1.7%	35
Non-First-Year	3,458	90.7%	39.0%	1,223
Subtotal	6,016			1,258
Commuting Students			<i>Mode Share</i>	
Commuting students (inside 0.5 miles)	3,086	89.1%	4.1%	113
Commuting students (outside 0.5 miles)	4,148	91.2%	28.8%	1,091
Subtotal	7,234			1,204
Employees			<i>Mode Share</i>	
Full-time	3,620	90.7%	59.0%	1,936
Part-time	585	53.7%	59.0%	185
Subtotal	4,205			2,122
Other Users				
Visitors				185
Fleet vehicles				234
Total peak parking demand				5,003
Total parking supply				4,534
Net spaces				-469

Sources: Calculated by CATMA Staff using the 2016 and 2018 CATMA Student and Employee Transportation Surveys, as well as information provided by institutional staff.

Exhibit 19: UVM needs a total of 756 off-site spaces by Fall 2019 and a total of 894 off-site spaces by Year 2025.

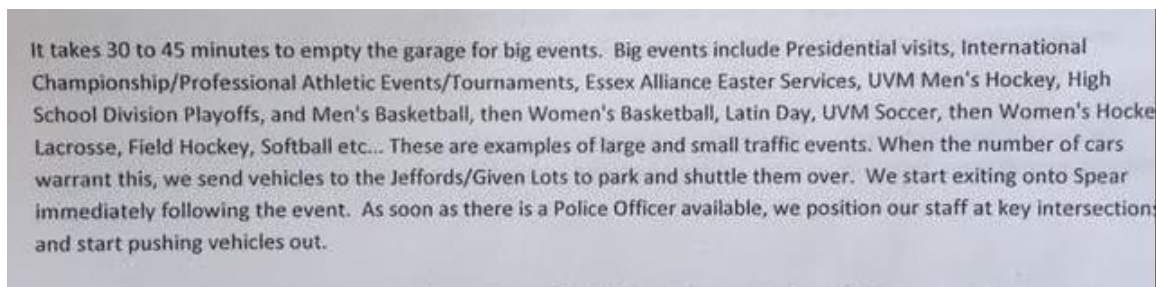
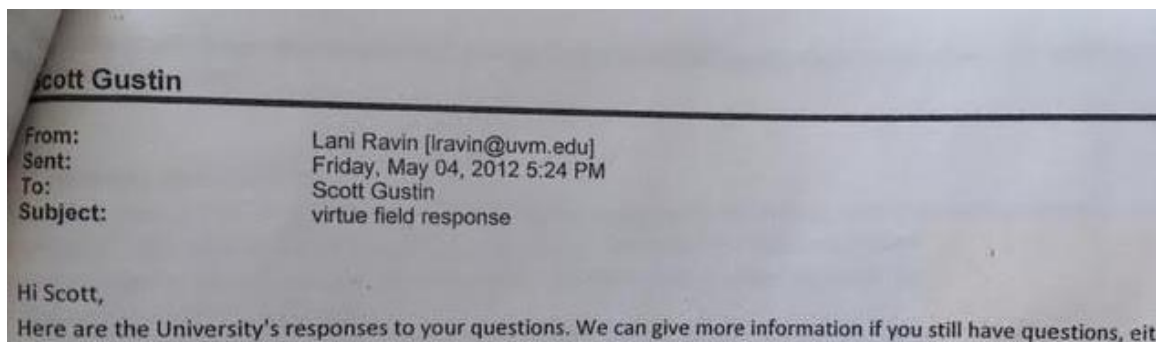
UVM reaches effective capacity when lots are 85% full. UVM needs 595 off-site parking spaces now and 894 in Year 2025.

	UVM's Parking Supply (net of 612 spaces it leases to UVMCMC)	To achieve 84% utilization rate, this would be the max number of cars parked in all UVM on- and off campus lots.	Estimated parking demand per JIPMP	Number of parking spaces that UVM needs to lease to satisfy its parking demand estimates.
Year 2020 (page 16)	4,939 includes 200 spaces that UVM has leased on Pine Street	4,198 = (4,939 x 85%) Parking supply x 85% utilization rate goal	4,754 From JIPMP page 19, Table 4-4.	4,754 – 4,198 = 556 parking spaces need to be leased in addition to the 200 parking spaces that UVM current leases on Pine Street = 756 leased parking spaces needed
Forecast 2025 (page 21)	5,045 includes 200 spaces on Pine Street and 200 spaces in Colchester	4,373 = (5,145 x 85%) Forecasted parking supply X 85% utilization rate goal	4,867 From JIPMP, page 21, Table 4-8.	4,867 – 4,373 = 494 parking spaces need to be leased in addition to the 200 parking spaces that UVM current leases on Pine Street and the 200 spaces that it will lease in the future in Colchester. In total UVM will need to lease 494+400 = 894 parking spaces by Year 2025.

If the city increases public access to parking on streets near UVM, these 756 and 894 UVM cars will be clogging our residential streets.

Exhibit 20: Prior to the PFG expansion / renovation project (2019-2020), UVM's largest event on the Athletic Campus was Obama's visit in 2012. A total of 4,500 persons attended.

In a May 4, 2012 email to the Planning Department, UVM's Lani Ravin lists events in sequential order by size. This list indicates that Obama's recent presidential visit was largest event hosted on the Athletic Campus. *"Big events include Presidential visits, International Championship/Professional Athletic Events/Tournaments, Essex Easter Alliance Services, UVM Men's Hockey, High School Division Playoffs, and Men's Basketball, then Women's Basketball, Latin Day, UVM Soccer, then Women's Hockey, Lacrosse, Field Hockey, Softball, etc. These are examples of large and small traffic events."*



Obama spoke to 4,500 spectators in the Gutterson Field House on May 30, 2012.

Fri, 03/30/2012 - 8:42am —



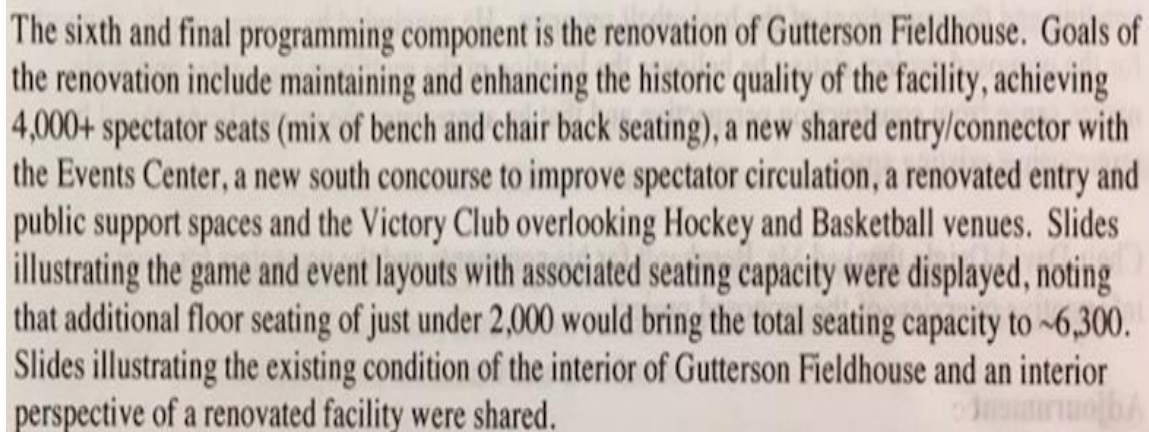
by Sam Hemingway President Barack Obama paid a four-hour campaign visit to Vermont on Friday, telling 4,500 people crammed inside a University of Vermont athletic complex that he is "not a perfect man" but the efforts of his

<https://vermontbiz.com/news/march/president-obama-visits-vermont>

Exhibit 21: March 2017 UVM Board of Trustee's minutes capture information presented by UVM's Athletic Director about Gutterson's total seating capacity increasing by 2,000 seats as a result of the PFG expansion / renovation project. Gutterson's new seating capacity, using floor space, will accommodate 6,300 event attendees.

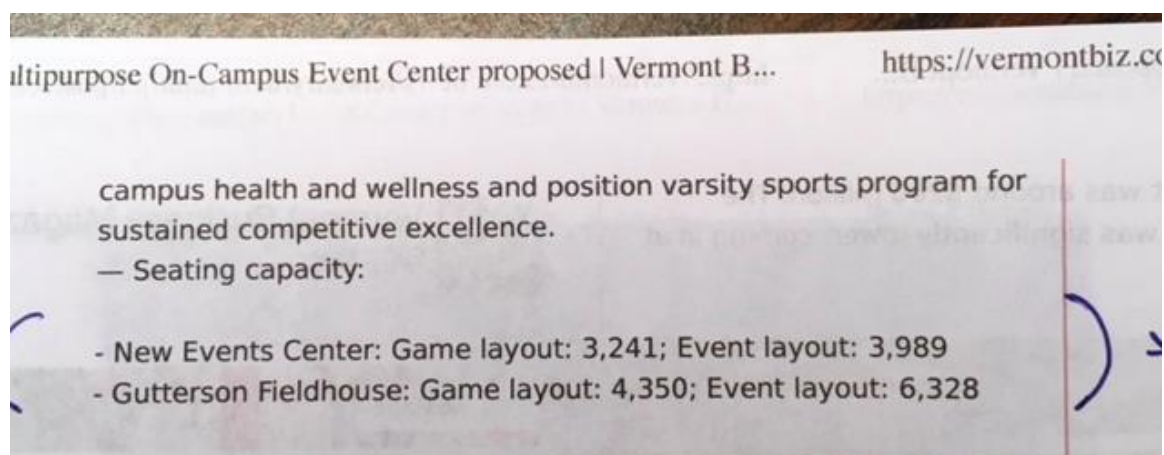
(A) UVM Trustees subcommittee minutes EPIR/BFI 2/3/2017, page 5

https://www.uvm.edu/trustees/standing_com/bfi/meetings/2017_feb3jointminutes.pdf



The sixth and final programming component is the renovation of Gutterson Fieldhouse. Goals of the renovation include maintaining and enhancing the historic quality of the facility, achieving 4,000+ spectator seats (mix of bench and chair back seating), a new shared entry/connector with the Events Center, a new south concourse to improve spectator circulation, a renovated entry and public support spaces and the Victory Club overlooking Hockey and Basketball venues. Slides illustrating the game and event layouts with associated seating capacity were displayed, noting that additional floor seating of just under 2,000 would bring the total seating capacity to ~6,300. Slides illustrating the existing condition of the interior of Gutterson Fieldhouse and an interior perspective of a renovated facility were shared.

(B) VT Biz Press Release 2/3/2017



Multipurpose On-Campus Event Center proposed | Vermont B... <https://vermontbiz.co>

campus health and wellness and position varsity sports program for sustained competitive excellence.

— Seating capacity:

- New Events Center: Game layout: 3,241; Event layout: 3,989
- Gutterson Fieldhouse: Game layout: 4,350; Event layout: 6,328

<https://vermontbiz.com/news/february/uvm-multipurpose-campus-event-center-proposed>

Exhibit 22:

Even when 100% of on-campus students attend the event (an unlikely scenario but used to minimize the forecast of number of people driving to the event) UVM's parking demand will exceed its effective capacity – which is when lots are 85% full.

Assuming 100% of on-campus students attend event	Parking Space Net supply before any PFG events	# of parking spaces needed for the event	Net # of parking spaces available during event	Parking lot utilization rate
1. Sold out Basketball games	551	0	551	87%
2. Sold out Hockey games	551	0	551	87%
3. 5,000 max if event uses Gutterson & Tarrant	551	0	551	87%
4. Gutterson's 6300 max seating capacity	551	234	318	93%
5. Max of 7,300 visitors on Athletic Campus	551	484	68	98%

In Fall 2018, 5,396 students lived on UVM's campus. In Fall 2019, 5,366 lived on-campus.

Exhibit 23: In the 2016 final version of the city’s Residential Parking Strategy, a top recommendation was that UVM needs make it a high priority to start and grow a remote (outside of Burlington) park and ride program. That recommendation was adopted into planBTV.

EXPAND SATELLITE PARKING AND INCENTIVIZE PARKING IN REMOTE LOTS

Incentivize use of satellite parking, including park-and ride and intercept lots, as part of a long-term transportation demand management strategy for commuters, students, and visitors during special events. This strategy is especially important for managing student parking demand and is increasingly important for managing commuter parking and heavy traffic during special events. This should be a priority for the City, major institutions, CATMA, and CCTA.

Primary Goals

- Balance Parking Needs
- Consider Limited Land Resources

Discussion

In addition to being an employment center drawing significant commuting traffic, Burlington has a significant college/university presence, with major institutions including Champlain College, University of Vermont (UVM), and UVM Medical Center. UVM has 3,650 undergraduate students who live off-campus, with an estimated 2,200 of those students living in Burlington.^v

While student renters have the same residential parking rights as any other renter living in the City, one key way to manage on-street residential parking, particularly in densely populated student areas, is to discourage students from bringing their cars in the first place. Students tend to use their cars less frequently than residents who drive for work on a daily basis, so their cars end up sitting on neighborhood blocks for long periods at a time, preventing needed turnover of spaces for other users. To this end, the City should continue

to coordinate with CCTA and the institutions to provide convenient satellite parking options, free transit service to downtown or campus, and financial incentives (such as gift certificates to the campus store) to encourage student participation. CCTA's "Unlimited Access" program provides transit passes for students, staff, and employees and is a successful example of coordination with area universities to encourage transit use and limit parking pressures adjacent to the institutions.

UVM, UVM Medical Center, and Champlain College currently all provide park and ride facilities at Lakeside Ave Lot (formerly the Gilbane Lot). All three campuses provide free off-site parking for their employees, staff, and students and CATMA coordinates with CCTA on its satellite commuter routes.^{vi} UVM currently prohibits all first-year students from bringing a car to campus, with the exception of a proven medical need. Parking on the University campus, with the exception of handicapped parking, is available through a permit/fee structure, with more distant spaces (Brown permit) priced at \$165/year and the closest spaces (Green permit) priced at \$329/year. UVM has developed an integrated policy to encourage use of alternative transportation. The University and colleges provide free transit passes, CATMA memberships, car share privileges, and up to eight emergency taxi rides home. It is important to keep these practices in place.

According to Association for the Advancement of Sustainability in Higher Education, one of the most popular ways to cut down on congestion is to close off central areas of campus to cars. This isolates traffic flow around the perimeter of the campus, where satellite parking lots are located. An investment must be made in alternative parking areas, and larger schools may need a public transit option, which UVM currently has. In the long term, there are likely significant savings in reducing the need for road maintenance within the campus.^{vii}

The CCRPC completed a Regional Park and Ride Plan in 2011, which presented a prioritized list of new Park & Ride and Intercept Facilities; and evaluated and recommended upgrades to existing facilities. A park and ride study was completed in 2014 considering a facility proximate to Exit 14. The construction of new park and ride lots, and the improvements to existing park and ride lots, as outlined in the forthcoming State of Vermont Park and Ride Plan, can help to meet the commuter parking demand of downtown businesses. Shuttles from these lots or free transit passes would likely be needed to bring people the last mile.

https://www.burlingtonvt.gov/sites/default/files/DPW/Publications/ResidentialParkingPlan_fina.pdf

Exhibit 24: UVM's strategy is to reduce traffic on-campus by reducing parking on-campus and building or expanding parking facilities on the periphery of campus. UVM wants to disperse these peripheral parking facilities so that the parking and traffic is spread all around campus. This is mentioned in the UVM Master Plan and also in 2019 Board of Trustee minutes.

This will increase traffic and reduce safety on residential streets that border campus. It is a cost and burden shift from UVM to city residents.

FUTURE PARKING INVENTORY BY CAMPUS ARCHITECTURAL DISTRICTS

The proposed parking distribution for the future pedestrian campus reflects the full envisioned build out of the campus based on the 2005 Paulien Study projections. The University has sufficient parking for all anticipated build out, enrollment and faculty/staff growth through 2015, and the projects on the Capital Project list.

The majority of parking demand in the future will be served by the existing and proposed Peripheral Lots.

Future parking spaces that will need to be retained within the campus core will be accommodated in structured parking and limited smaller surface lots, where possible and appropriate. Co-locating service spaces is desirable to reduce future spaces, while visitor and handicapped parking will be retained in the core parking areas. The overall intention will be to move the parking spaces removed from each District into the peripheral parking area nearest to that District.

In order to achieve the goal of a pedestrian campus and accommodate the future parking to parking, the University needs to consider the following potential strategies:

- Decreasing core parking numbers in applicable districts through the following methods:
 1. revisiting student parking policy and numbers by district;
 2. adding in new parking in small scale lots where possible or appropriate within the district or at the edge of the district;
 3. placing the shortfall in peripheral lots; and/or
 4. reconsidering visitor/service handicapped parking locations and numbers.

- The University will continue to use and expand as intensively as possible Transportation Demand Management (TDM) approaches.

- The University will need to further develop and expand the peripheral lots. This is the critical core element of the future parking distribution and location strategy. The future shuttle system routes will need to be modified to serve the peripheral lots.

- Work with the appropriate local, state and regional entities to continue to use and further develop the regional intercept lots similar to what is currently occurring at the Lakeside facility (Gilbane). Regional transit in the long term should serve these lots and the University in a coordinated manner.

- Support and work through Campus Area Transportation Management Association (CATMA) with Chittenden County Transportation Authority (CCTA) and others as appropriate to improve regional transit service and continue to provide incentives for ridership. All CCTA routes are available to University faculty, staff, and students free. Bus rapid transit along the Route 2 corridor is one future possibility that might be effective and in the future the critical mass may warrant reviving the commuter rail system regionally.

- The LINK Express is another CATMA unlimited access program that the University participates in that is operated by CCTA is already exhibiting signs of success. LINK Express routes currently from St. Albans, Montpelier, and Middlebury provide an alternative to driving into Burlington alone with a direct bus connection. The LINK Express is free to University faculty, staff and students.

- Further develop faculty staff housing (through public/private partnerships) close to campus so that these residents can walk/bike/shuttle to their workplace, thus reducing parking demand on campus.

- Address how to best manage student parking to include:

1. identify which students are allowed to have cars;
2. consideration of long term car storage options; and
3. placement of student cars in peripheral lots.

- It is also important to note that as the University expands into external campuses or leased spaces elsewhere in Greater Burlington area or regionally, parking demand on Main Campus may be consequently reduced.

This is the long term vision for the University's parking system and realization of a pedestrian campus. The University will continue to explore innovative approaches and solutions to effectively address the needs for campus parking while relocating parking from the core campus to the periphery and/or off-campus.

Larner College of Medicine and College of Arts & Sciences Psychological Science Medical Research Complex Project Update

Larner College of Medicine Dean Richard Page discussed his first month on campus and shared that his time has been spent learning about the organization of the College, mission areas and its relationship to the University of Vermont Medical Center. Director of Capital Planning & Management Robert Vaughan previewed that the Budget, Finance and Investment Committee will be presented with a resolution, later today, to approve \$6 million to continue the project's design and pre-construction process and cost estimate, which will cover renovation of existing buildings, deferred maintenance and a new structure.

Chair Daigle noted that **parking** spots will be lost as a result of this project, for which a solution will need to be created. Dean Page agreed that parking would need to be addressed and he stated that the College has a vision to develop a Green in the place of parking.

Trustee Curt McCormack stated that he sees the reduction of parking as a positive and encouraged a move to perimeter parking. Chair Daigle and Dean Page agreed that perimeter parking and campus green engagement would be positive.

Exhibit 25: **Off-site Parking at Pine Street (Fall 2019) and in Colchester (Year 2025)**

A) PINE STREET: Due to the limited hours of access, and limited shuttle services, the Pine Street lot is more of a Warehousing option rather than a park and ride program

www.uvm.edu › [Transportation-and-Parking-Services](#) ▾ PDF

351 Pine Street- Zoom In

Page 1. 351 PINE ST. PARKING LOT: OPEN DAILY. 7am - 5pm. MON to FRI.

My question is in Blue. CATMA's response is in Red: "UVM had plans to warehouse residential student vehicles this fall at their new leased lot at 351 Pine Street"

6. Given the high average utilization rates, the 5 year plan ought to include details for how UVM would implement and operate a remote (outside of Burlington) satellite parking program to manage parking space deficits. It would be very helpful to have this plan ready and blessed ahead of time so it can be implemented when it looks like UVM parking demand threatens to overflow onto city streets. Is there a plan that is ready to implement and has all the necessary approvals? What needs to happen to get to this level of preparedness?

UVM had plans to warehouse residential student vehicles this fall at their new leased lot at 351 Pine Street. Due to the impacts of COVID-19 pandemic w/ more employees continuing to work from home and students learning remotely, UVM has been able to house everyone on main campus lots at this time. UVM plans to utilize the Colchester Research Facility by 2025, and they have a plan in place to move this site option forward. UVM recently underwent a planning study with Nelson & Nygaard which will help inform that plan.

B) COLCHESTER SPACES PLANNED FOR 2025

CATMA: “ UVM is in the assessment phase for this CRF parking lot (Colchester) and does not have detailed info yet on who would park there or the availability, and/or frequency of potential shuttle service.”

9. During the presentation I heard mention of 200 parking spaces that UVM is leasing in Colchester. Where is this detailed in the JIPMP? How many spaces in total are leased by UVM? How many are sub-leased to students ? To Faculty? How do users get from that lot to campus? Does this lot provide users 24/7 access to their car?

UVM currently holds a lease for 200 parking spaces at Pine Street lot. There are plans to acquire an additional 200 spaces by 2025 at the Colchester Research Facility (CRF) site. UVM is in the assessment phase for this CRF parking lot and does not have detailed info yet on who would park there or the availability and/or frequency of potential shuttle service.

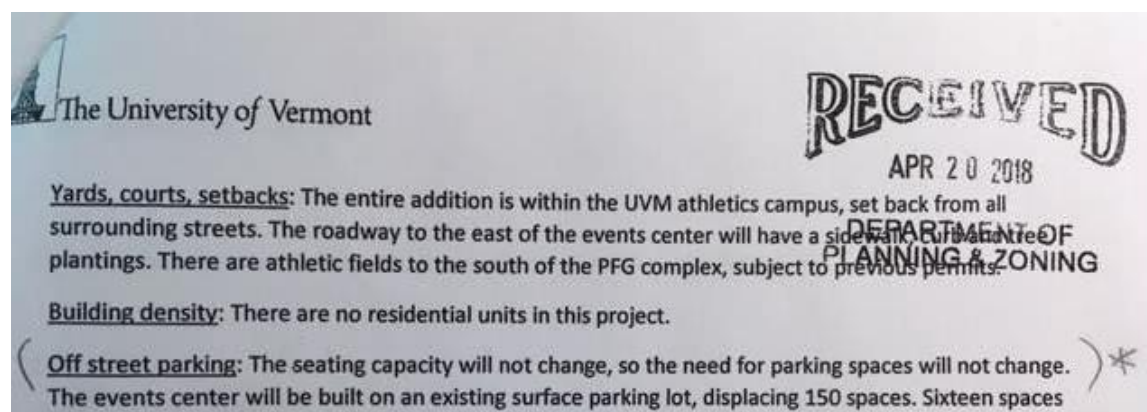
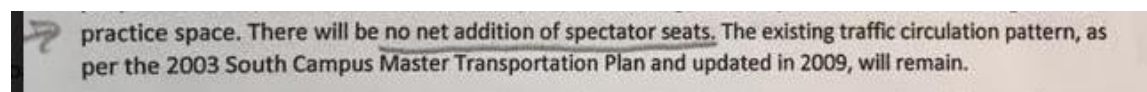
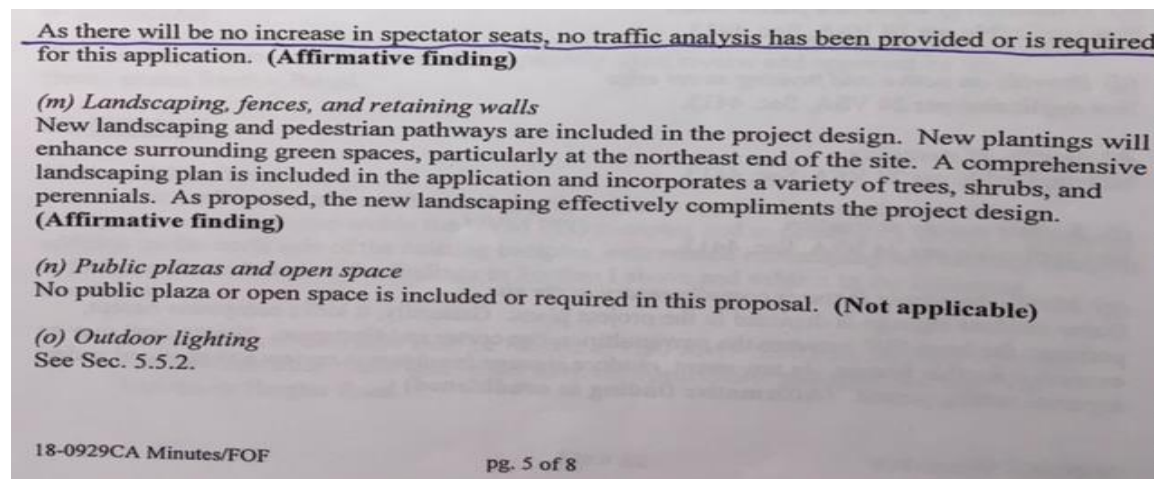
Exhibit 26: Is UVM trying to gain access to on-street parking by encouraging the city to adopt policies and tactics to give more public access to parking on streets near the campus?

Around 2016 a neighbor wanted the city to eliminate the public parking that was in front of his house on S. Prospect because it was always filled with UVM cars. He wanted to have the space protected by the Residential Parking program. The city agreed and at the same time created 4 public access spots with 4 hour windows in front of the UVM Redstone green.

Before the meeting participants came to the conclusion of how to address the city resident’s request/problems with UVM drivers not giving him any curbside space for his own use, the Public Works Commissioner, who is the Director of UVM Parking and Transportation suggested installing parking meters. That idea was immediately shot down by a City Councilor and the DPW Director because they had received hundreds of complaints when the idea of installing parking meters in front of people’s residential low density zoned houses came up during the DPW work in developing recommendations for the city’s Residential Parking Strategy. People feel that parking meters belong downtown and not in front of their Ward 6 homes. The fact that the Commissioner mentioned the already-killed idea indicates he is supportive of the concept of increasing public access to parking on streets near UVM and not losing those on-street parking spaces that are already used by UVM commuters.

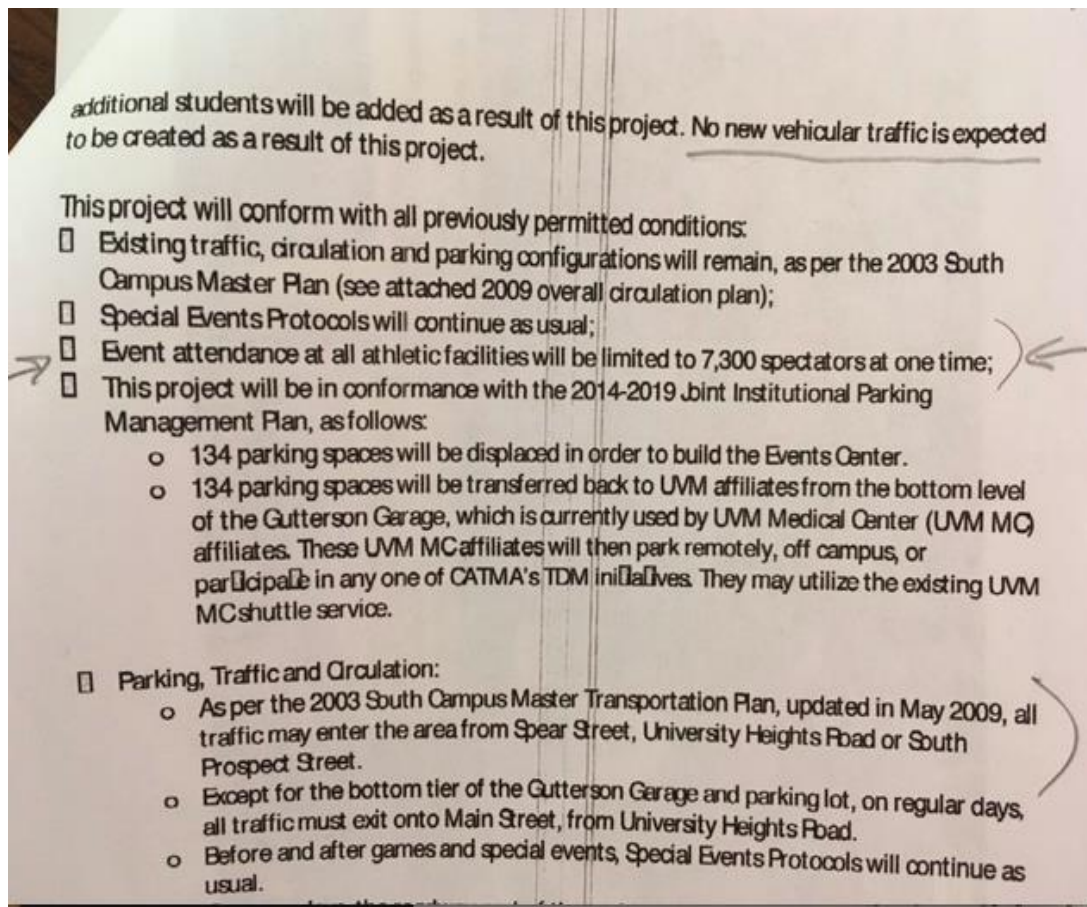
Exhibit 27: These are screen shots of information that UVM provided the DRB in 2018 when requesting a permit for the renovation and expansion of PFG.

The following statement was included in the DRB Findings dated 7/5/18, page 5: **“No increase in number of spectator seats, therefore no traffic study has been provided or is required.”**



The DRB finding, which is shown in the 1st screen shot above, and written by the Planning Department for the DRB, is inaccurate because Gutterson’s seating capacity is increasing from 4,500 to 6,300 persons for speaking events, concerts, etc.

Furthermore, UVM wants to start hosting up to 7,300 persons at the same time on the Athletic Campus. Evidence: UVM Proposed Project Description, 7/5/2018, page 4.



https://www.burlingtonvt.gov/sites/default/files/Agendas/SupportingDocuments/Project_Description_OCMC_final_0.pdf

Hence, UVM should have provided the DRB with a traffic forecast and a parking demand and supply analysis given that UVM except for its graduation ceremony, UVM has never had 7,300 spectators at one time on the Athletic Campus. (During the annual graduation ceremony there is significant police support to manage traffic and close roads; employees have the day off, and parking lots are emptied of all cars except for those belonging to people attending the graduation ceremony.)

Exhibit 28: The following screen prints are from the May 2019 JIPMP. There is no mention of Gutterson’s seating capacity increasing by 2,000 seats to a total of 6,300 seats – which is the capacity that UVM confirmed during the Act 250 Commission and in the February 2017 UVM Trustee’s meeting. Therefore, UVM had accepted a new design plan by 2017, a year before it met with the DRB in 2018 to request a permit and parking waiver for the PFG project.

TABLE 4-18: STATUS OF PREVIOUSLY IDENTIFIED UVM BUILDING PROJECTS

BUILDING PROJECT	COMPLETED?		NOTES
	Yes	No	
Multi-Purpose Event Center		✗	Carried forward to current 5-year Plan, project will start in spring 2019 and be completed by summer 2021
STEM	✓		Renovations on two existing buildings (Votey and the Innovation) and one new build (Discovery), scheduled to open in May 2019
Kalkin Addition (Ifshin Hall)	✓		Completed in 2018
61 Summit (Alumni House & Silver Pavilion)	✓		Completed in 2016
UVM Rescue Building	✓		Completed in 2017
Billings	✓		Completed in 2018
Housing Master Plan—Phase I	✓		Completed in 2017
Athletic Recreation Center		✗	Carried forward to current 5-year Plan as part of the Multi-Purpose Event Center
Virtue Field Outdoor Seating	✓		Phase 1 and 2 complete, Phase 3 carried forward to current 5-year Plan

Table 4-19 summarizes projects carried forward from the previous JIPMP as well as new planned projects identified by UVM staff estimated for completion by 2024. In total, these will result in an estimated loss of 88 spaces.

TABLE 4-19: UVM PLANNED PROJECTS

	PRIMARY USE	CHANGE IN RES BEDS	CHANGE IN GSF	CHANGE IN PARKING SPACES
Tarrant (Multi-Purpose) Event Center	Athletic	-	119,099	-149
New Research Facility for COM	Academic/Research	-	75,000	-107
Torrey/Votey Lot	Academic/Research	-	2,626	-21
Outing Club Relocation	Student Support	-	13,250	5
Gund Institute	Academic/Research	-	14,000	-5
Fleming Museum	Academic/Admin/ Student Support	-	0	10
Interfaith Center Parking Lot	NA	-	0	40
University Road (East Ave. to Compound)	NA	-	0	15
Southwick Hall	Academic/Research	-	0	2
Univ. Heights Rd/Davis Rd (Patrick Cir. to Southwick)	NA	-	0	20
Blundell	Academic/Research	-	0	5
Music Building Recital Hall Addition	Academic/Research	-	4,544	2
ADA Code Compliance	NA	-	0	-20
Future Structured Parking	NA	-	-	TBD
Residential Life Replacement Beds	Residential	500	120,000	95
Library Addition	Academic/Research	-	2,400	1
Central Heating & Cooling Plant	NA			
Cohen Hall/ Taft School	Academic/Research	-	25,000	0
439 College St	Student Support	-	14,864	19
Virtue Field Phase III	Athletic	-	5,000	0
TOTAL Increase		500	390,783	-88

Sources: Information provided by institutional staff.

Notes: Tarrant Event Center value assumes replacement of existing spectator seating at Patrick Gym with same number of spectator seats at new facility. Virtue Field Phase III relates to support functions such as bathrooms, ticketing, concessions, and locker rooms; no change is planned to overall capacity at

Gutterson's increase in seating capacity as a result of the PFG project is not mentioned in the footnotes of this table.